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4 S DONALD?/IN AND HAHNFELD?/IN  
L2 2 S EP1198516/PN OR US2002061981/PN OR 2003119971/PN OR US2002061981/PN  
L3 3 S EP1198516/PN OR US2002061981/PN OR 2003119971/PN OR US2002061981/PN  
FILE 'DPCI' ENTERED AT 13:52:29 ON 05 SEP 2003  
L4 2 S EP1198516/PN OR US2002061981/PN OR 2003119971/PN OR US2002061981/PN  
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L5 2 S E1/PN  
L6 0 S US3598886/PN  
L7 0 S US3598886/PN  
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L8 1 S US3598886/PN  
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L9 16 S E1-E15/PN

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L1 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2000:900718 CAPLUS  
DN 134:57505

TI Blend or dispersion compositions comprising hydrogenated block copolymers and end-use molding applications

IN Donald, Robert J.; Hahnfeld, Jerry L.; Parsons, Gary  
D.; Hahn, Stephen F.; Patel, Rajen M.; Esneault, Calvin P.; Phipps, Laura  
M.; Pate, James E.; Bhattacharjee, Debkumar

PA Dow Chemical Co., USA  
SO PCT Int. Appl., 65 pp.  
CODEN: PIXXD2

DT Patent

LA English

IC ICM C08L053-02

ICS C08F008-04; B32B027-00

CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38, 39

FAN.CNT 10

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000077094	A1	20001221	WO 2000-US13898	20000519
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1198516	A1	20020424	EP 2000-936127	20000519
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	BR 2000012219	A	20020507	BR 2000-12219	20000519
	JP 2003502470	T2	20030121	JP 2001-503941	20000519
PRAI	US 1999-139075P	P	19990611		
	US 1999-146008P	P	19990728		
	US 2000-193313P	P	20000330		
	WO 2000-US13898	W	20000519		

AB Flexible hydrogenated block copolymers can be used in films, profiles, sheets, coatings, injection molded articles, blow or rotational molded articles and pultruded articles. The title blends comprise fully hydrogenated block copolymers of vinyl arom. unit and conjugated diene unit at wt. ratio 60:40, a no.-av. mol. wt. (Mn) 30,000-150,000, a hydrogenated vinyl arom. unit Mn 5000-45,000, a hydrogenated conjugated diene unit Mn 12,000-110,000, and a hydrogenation level >90%. A 90:10 blend of ethylene-propylene copolymer and hydrogenated triblock butadiene-styrene copolymer (90,000, 32% hydrogenated polystyrene and 40% 1,2-butadiene) was molded into a sample part showing deflection temp. under load (264 psi) 50.degree., hardness 58.7, flexural modulus 1030 MPa, Dart impact strength (-40.degree.) 4 J, tensile strength 15 MPa, and elongation 4.6%.

ST hydrogenated block copolymer blend molded article; film article  
hydrogenated block copolymer; molding hydrogenated block copolymer blend  
property

IT Containers

Electric cables

Food packaging

Gaskets

Geomembranes

Gloves

Hoses

Labels

Membranes, nonbiological

Pipes and Tubes

Roofing

Sign materials  
Toys  
    (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Epoxy resins, uses  
Polyamides, uses  
Polycarbonates, uses  
Polyesters, uses  
Polyethers, uses  
Polyurethanes, uses  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
    (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Polymer blends  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
    (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Medical goods  
    (blood bags; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Shoes  
    (boots; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Automobiles  
    (bumpers; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Paper  
    (coated; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Polyolefin rubber  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
    (ethylene-octene; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Medical goods  
    (films; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Automobiles  
    (instrument panels; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Films  
    (medical; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Construction materials  
    (siding; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Drug delivery systems  
    (transdermal, controlled-release; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Medical goods  
    (tubes; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT Seals (parts)  
    (weatherstrips; blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT 9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinyl chloride  
9002-88-4D, Polyethylene, chlorinated 9003-53-6D, Polystyrene,  
hydrogenated 9003-54-7 9003-56-9, Acrylonitrile-butadiene-styrene  
copolymer 9010-77-9, Ethylene acrylic acid copolymer 25038-59-9,  
Polyethylene terephthalate, uses 25067-34-9, Ethylene vinyl alcohol  
copolymer 25068-12-6, Ethylene styrene copolymer  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
    (blend compns. comprising hydrogenated block copolymers for moldings with good balance of phys. properties)

IT 9002-88-4, Polyethylene 9010-79-1, Ethylene-propylene copolymer  
26007-43-2, Topas 5013 26221-73-8, Ethylene-1-octene copolymer  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(blend compns. comprising hydrogenated block copolymers for moldings  
with good balance of phys. properties)  
IT 106107-54-4D, Butadiene-styrene block copolymer, hydrogenated  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(triblock; blend compns. comprising hydrogenated block copolymers for  
moldings with good balance of phys. properties)  
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Dow Chemical Co; WO 9415997 A 1994 CAPLUS  
(2) Dow Chemical Co; WO 9634896 A 1996 CAPLUS  
(3) Edmonson, M; WO 9816582 A 1998 CAPLUS  
(4) Exxon Chemical Patents Inc; WO 9421694 A 1994 CAPLUS  
(5) Mitsubishi Chem Ind; EP 0505110 A 1992 CAPLUS  
(6) Nippon Zeon Co; DE 3227650 A 1983 CAPLUS  
(7) Walther, B; US 5905097 A 1999 CAPLUS

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